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ABSTRACT

Many important social judgments involve deciding whether a person is likely to be successful in a particular situation. The literature on stereotypes suggests that there is a differential application of conceptualizations of ability in describing age and sex groups. This study investigated the hypothesis that age and sex stereotypes are associated with conceptualizations demonstrating ability. Separate samples of 30 graduate students and 14 undergraduate students rated the characteristic age and sex associated with traits related to demonstrating ability through competence and superiority. Samples of 10 undergraduates each rated the frequency of the traits in the population, the number of occasions which allow confirming the presence of the traits, and the number of instances required to confirm that the traits characterized an individual. The results indicated that traits related to demonstrating ability through superiority were more characteristic of younger individuals and males than were traits reflecting competence. Moreover, traits related to demonstrating ability through superiority were seen as more diagnostic and more readily confirmable than traits reflecting competence. These findings suggest that demonstrating superiority would be overweighted in memory-based evaluations and would thus promote the young male stereotype of achievement. (Author/ABL)

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Structural Properties of Ability Conceptualizations in Age and Sex Stereotypes

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Abstract

This study investigated the hypothesis that age and sex stereotypes are associated with conceptualizations of demonstrating ability. Separate samples of 30 graduate students and 14 undergraduates rated the characteristic age and sex associated with traits related to demonstrating ability through competence and superiority. Samples of 10 undergraduates each rated the frequency of the traits in the population, the number of occasions which allow confirming the presence of the traits, and the number of instances required to confirm that the traits characterized an individual. The results indicated that traits related to demonstrating ability through superiority are more characteristic of younger individuals and males than are traits reflecting competence. Moreover, traits related to demonstrating ability through superiority were seen as more diagnostic and more readily confirmable than traits reflecting competence. These findings suggest that demonstrating superiority would be overweighted in memory-based evaluations and would thus promote the young male stereotype of achievement.

Structural Properties of Ability Conceptualizations in Age and Sex Stereotypes

Many important social judgments involve deciding whether a person is likely to be successful in a particular situation. Research has shown that even untrained judges have well-established conceptualizations of characteristics necessary to be successful in specific domains (Hakel, Hollman, & Dunnette, 1970; Rush, Thomas, & Lord, 1977).

A recent theory of achievement motivation (Nicholls, 1984) suggests that individuals also have well-established conceptualizations of behaviors and traits related to ability in general. According to Nicholls (1984), the distinguishing goal of achievement behavior is demonstrating ability. Nicholls (1984) has proposed that two conceptualizations are used in thinking about how ability is demonstrated. The first and more fundamental conceptualization characterizes ability as being demonstrated through understanding and mastery of task demands. In this case, behaviors and traits related to demonstrating competence are salient in defining ability. The second conceptualization views ability as being demonstrated through comparative performance. In this case, behaviors and traits related to exhibiting superiority are salient in defining ability.

The literature on stereotypes suggests there is differential application of these conceptualizations of ability in describing age and sex groups. This research indicates that both younger

individuals and males receive more favorable consideration than older individuals and females regarding performance evaluations and judgments of their potential for development and advancement (Ferris, Yates, Gilmore, & Rowland, 1985; Lee & Clemons, 1985; Pheterson, Kiesler, & Goldberg, 1971; Rosen & Jerdee, 1974, 1976a, 1976b; Waldman & Avolio, 1986). Similarly, other research suggests that behaviors and traits related to demonstrating superiority are more likely to be expected of younger individuals and men than of older individuals and women (Braithwaite, 1986; Craft, Doctors, Shkop, & Benecki, 1979; Rosen & Jerdee, 1978; Schein, 1973, 1975).

The stereotypes related to conceptualizations of demonstrating ability may stem, in part, from the distribution of age and sex groups into occupational roles (Eagly & Steffen, 1984). Women participate in the labor force at a lower rate than men (U. S. Department of Labor, 1980) and older individuals are less likely to be promotable than younger individuals within a job level as stationarity reduces advancement (Pritchard, Maxwell, & Jordan, 1984). Such structural differences tend to exaggerate perceptions of between-group differences (Taylor, Fiske, Etcoff, & Ruderman, 1978).

Structural aspects of the environment also affect the distribution of the frequency of behaviors and traits being represented (Rothbart & Park, 1986). Such differences may be important in maintaining stereotypes in that less frequent behaviors are more diagnostic of correspondent dispositions than are more frequent behaviors (Jones & Davis, 1965). As the Nicholls (1984) model

holds that demonstrating competence is a more fundamental conceptualization of ability than is demonstrating superiority, it is likely that behaviors related to demonstrating superiority are less frequent than those related to demonstrating competence. Moreover, as younger individuals and men are more likely to be represented in situations in which demonstrating superiority is salient, demonstrating superiority is more likely to be associated with younger individuals and men than with older individuals and women.

Method

Subjects

Two separate samples were used for the age and sex rating task. The first sample consisted of 11 male and 19 female students in graduate courses in personnel psychology, public administration, and criminal justice administration. The second sample consisted of five male and nine female undergraduates in an upper level psychology course. Separate samples of 10 undergraduates in introductory psychology classes, five males and five females in each case, rated the frequency of the traits in the population, the frequency of occasions which allow for confirming each trait, and the number of behavioral instances required for confirming each trait. Participation was voluntary and based on informed consent.

Procedure

Age and sex rating task. Each subject was given a form labeled Behavior Rating Task. The instructions directed them to

indicate at which of the designated ages a person would be most likely to display the particular behavior and if the behavior was more characteristic of a man or a woman. Following the instructions was a list of 14 traits from Sadowski and Long-Hall (1985) which reflect the different conceptualizations about demonstrating ability. In order of presentation, these were: reliable, adventurous, responsible, bold, accurate, enterprising, thorough, aggressive, careful, forceful, disciplined, opportunistic, dependable, and daring. The seven traits in the odd positions in the order reflect behaviors directed at demonstrating competence while those in the even positions in the order reflect behaviors directed at demonstrating superiority. The characteristic age associated with each trait was rated on a 5-point scale. Age categories ranged from 25 to 65 with 10-year intervals. Higher scores indicated an older age rating. Subjects also indicated whether the trait would be characteristic of a male (scored as -1), a female (scored as 1), or either (scored as 0).

Frequency and evidence-to-inference task. Each subject was randomly assigned to one of three judgment tasks used by Rothbart and Parks (1986). Subjects rated the 14 traits as to how frequently they expected to see the trait in the general population, how frequently occasions arose that would permit behaviors that confirm the trait, and how many confirming behaviors a person would have to engage in before they would consider the trait to accurately describe the person. Ratings were made on 9-point

scales with higher scores indicating greater frequency of more required instances.

Results

The mean ratings of the characteristic age and sex of the traits by the two samples are presented in Table 1. Traits related to demonstrating ability through superiority were rated as more characteristic of a younger person than those related to demonstrating ability through competence by both the graduate sample, $t(29) = 6.79$, $p < .001$, and the undergraduate sample, $t(13) = 4.10$, $p < .01$. Similarly, traits related to demonstrating ability through superiority were rated as more likely to characterize males than were traits related to demonstrating ability through competence by both the graduate sample, $t(29) = 3.49$, $p < .01$, and the undergraduate sample, $t(13) = 4.73$, $p < .001$.

Insert Table 1 about here

To determine the degree of similarity between the characteristic age and sex ratings of the traits, the mean ratings of the traits were correlated within each sample. As indicated in Table 2, traits rated as characterizing a younger person were also likely to be rated as characterizing a male while traits rated as characterizing an older person were also alikely to be rated as characterizing a female in each sample. Thus the data suggest that demonstrating ability through superiority is seen as primarily being

characteristic of young males.

Insert Table 2 about here

As a means of discerning the differential diagnosticity of the traits, the mean ratings of the traits on the frequency judgments and the evidence-to-inference task were correlated with trait type, mean age rating, and mean sex rating of the traits. For this analysis, the age and sex ratings from the two samples were combined as they were highly correlated, $r(12) = .93$, $p < .0001$, for the age ratings and $r(12) = .95$, $p < .0001$, for the sex ratings. Consistent with expectations, the correlations in Table 3 indicate that traits related to demonstrating ability through competence and more characteristic of females were rated as occurring more frequently in the general population than those related to demonstrating ability through superiority and more characteristic of males. Moreover, the correlations show that traits related to demonstrating ability through competence and more characteristic of older individuals and females were rated as providing more occasions to confirm the presence of such traits and requiring more instances to confirm the presence of such traits than those related to demonstrating ability through superiority and more characteristic of younger individuals and males.

Insert Table 3 about here

Discussion

The results of this indicate that conceptualizations of ability are linked to both age and sex stereotypes. Traits related to behaviors directed at demonstrating ability through superiority are seen as being more characteristic of younger individuals and males than are traits related to demonstrating ability through competence.

These findings provide further insight into the basis of the "young tiger" syndrome" (Berlin, 1976) in designating young males as beneficiaries of preferential treatment in personnel actions. The results of the frequency judgments and evidence-to-inference judgments indicate that traits related to demonstrating ability through superiority and typifying young males are less normative and more diagnostic of underlying dispositions than those related to demonstrating ability through competence.

Research on the effects of prototypes on information processing (Hamilton & Rose, 1980; Foti & Lord, 1987) suggests the association of traits related to demonstrating ability through superiority with young males would result in memory-based evaluations in which estimations of prototypical behaviors would be enhanced and estimations of non-prototypical behaviors would be reduced for that group. The Nicholls (1984) model further suggests that demonstrating ability through superiority also implies a correspondent degree of enabling competence. This would result in demonstrations of superiority being overweighted in memory-based evaluations. Thus, the use of a prototype schema in evaluations

would act to maintain the young male stereotype of achievement and increase the likelihood of young males being the beneficiaries of preferential treatment in decisions about performance.

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Table 1

Mean Characteristic Age Ratings and Mean Characteristic Sex Ratings for the Traits

Rated Characteristic	N	Trait Type: Competence	Trait Type: Superiority
Age			
Sample 1	30	2.31	1.40
Sample 2	14	2.34	1.57
Sex			
Sample 1	30	.21	-.39
Sample 2	14	.25	-.46

Note. For the age ratings higher scores indicate a higher rated age and for the sex ratings higher scores indicate the trait was more characteristic of a female.

Table 2

Correlations between Mean Characteritic Age Ratings and Mean Characteristic Sex Ratings of the Traits

Source	Correlation
Sample 1	.80*
Sample 2	.79*

Note. df = 12. *p < .001, two-tailed.

Table 3

Correlations of Inference Dimension Ratings with Trait Type, Age Ratings of Traits, and Sex Ratings of Traits

Inference Dimension	Trait[a] Type	Age Ratings	Sex Ratings
Frequency	.60**	.30	.60**
Confirming Occasions	.85*	.81*	.80*
Confirming Instances	.89*	.61**	.82*

Note. df = 12. *p < .001. **p < .05. All p values are two-tailed. [a]Traits were coded 1 for Competence and -1 for Superiority.